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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,516	04/03/2006	Zhimei Wu	W67.12-0001	9243

27367 7590 07/14/2008

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EXAMINER	
CHANG, JUNGWON	
ART UNIT	PAPER NUMBER
2154	

MAIL DATE	DELIVERY MODE
07/14/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/526,516	WU ET AL.	
	Examiner	Art Unit	
	JUNGWON CHANG	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 March 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 4-6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 4-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Action is in response to amendment filed on 3/11/08. Claim 3 has been canceled. Claims 1, 2 and 4-6 are presented for examination.

2. This Action is Final.

3. The examiner maintains the 101 rejection, which was made in previous Office Action dated 12/14/07 because the amendment does not overcome the 101 rejection.

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility.

MPEP section 2107.01, General Principles Governing Utility Rejections, which stats in part:

The Office must examine each application to ensure compliance with the "useful invention" or utility requirement of 35 U.S.C. 101. In discharging this obligation, however, Office personnel must keep in mind several general principles that control application of the utility requirement. As interpreted by the Federal courts, 35 U.S.C. 101 has two purposes. First, 35 U.S.C. 101 defines which categories of inventions are eligible for patent protection. An invention that is not a machine, an article of manufacture, a composition or a process cannot be patented. See *Diamond v. Chakrabarty*, 447 U.S. 303, 206 USPQ 193 (1980); *Diamond v. Diehr*, 450 U.S. 175, 209 USPQ 1 (1981). Second, 35 U.S.C. 101 serves to ensure that patents are granted on only those inventions that are "useful." This second purpose has a Constitutional

footing - Article I, Section 8 of the Constitution authorizes Congress to provide exclusive rights to inventors to promote the "useful arts." See *Carl Zeiss Stiftung v. Renishaw PLC*, 945 F.2d 1173, 20 USPQ2d 1094 (Fed. Cir. 1991). Thus, to satisfy the requirements of 35 U.S.C. 101, an applicant must claim an invention that is statutory subject matter and must show that the claimed invention is "useful" for some purpose either explicitly or implicitly. Application of this latter element of 35 U.S.C. 101 is the focus of these guidelines.

Deficiencies under the "useful invention" requirement of 35 U.S.C. 101 will arise in one of two forms. The first is where it is not apparent why the invention is "useful." This can occur when an applicant fails to identify any specific and substantial utility for the invention or fails to disclose enough information about the invention to make its usefulness immediately apparent to those familiar with the technological field of the invention. *Brenner v. Manson*, 383 U.S. 519, 148 USPQ 689 (1966); >*In re Fisher*, 421 F.3d 1365, 76 USPQ2d 1225 (Fed. Cir. 2005);< *In re Ziegler*, 992 F.2d 1197, 26 USPQ2d 1600 (Fed. Cir. 1993). The second type of deficiency arises in the rare instance where an assertion of specific and substantial utility for the invention made by an applicant is not credible.

6. Claim 1 merely recite: a backbone Gigabit Ethernet switch which is connected..., a plurality of Gigabit Ethernet Switches which are connected…, a plurality of home gateways which are connected…, an IP telephone which is connected…, a plurality of wireless gateways which are connected…, the video server is connected…, a software system including an operating systems, multicasting software, accounting software, network management software, and application software. This is nothing more than connectivity of each element. Applicant has not taught a pre or post operation, transformation nor provide any useful outcome.

The merely claimed elements fail to identify any specific and substantial utility for the invention or fail to disclose enough information about the invention to make its usefulness immediately apparent to those familiar with the technological field of the invention. *Brenner v. Manson*, 383 U.S. 519, 148 USPQ 689 (1966); >*In re Fisher*, 421

F.3d 1365, 76 USPQ2d 1225 (Fed. Cir. 2005);< *In re Ziegler*, 992 F.2d 1197, 26 USPQ2d 1600 (Fed. Cir. 1993). Therefore, the claimed invention fails to produce either a physical transformation or a useful, concrete and tangible result.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a specific asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claim 1 contains the trademark/trade name “Linux, Windows® system, Microsoft Corporation”. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods

themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe "operating system, Windows system" and, accordingly, the identification/description is indefinite.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 1, 2, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wendt et al. (US 7,075,919), hereinafter Wendt, in view of Kung et al, (US 6,826,173), hereinafter Kung, Furukawa et al, (US 2002/0124084), hereinafter Furukawa.

13. As to claim 1, Wendt discloses the invention substantially as claimed, including a community network system with broadband integrated services (col. 1, lines 8-11) comprising:

a backbone Gigabit Ethernet Switch (116, fig. 4B) which is connected to a metropolitan area network via a 1000 Mbps port, and is connected to a satellite digital television receiver server (fig. 4A, "local TV tower, satellite dish farm"), a video server (col. 4, lines 10-17, "media hosting servers"), a video conference server, a network

accounting server, and a network management server via a 1000 Mbps port or a 100 Mbps port (col. 5, lines 7-22; col. 17, line 61 – col. 18, line 21) (col. 17, line 61 – col. 18, line 21, "fast Ethernet ports") (fig. 4A; col. 16, lines 21-38, "switches 112, 116, 126, 170 and 196 may be coupled in any appropriate manner");

a plurality of Gigabit Ethernet Switches which are connected to the backbone Gigabit Ethernet Switch via a 1000 Mbps port and to a plurality of Fast Ethernet switches having 10/1000 Mbps compatible ports via a 1000 Mbps port (col. 17, line 61 – col. 18, line 21, "fast Ethernet ports") (fig. 4A; col. 16, lines 21-38, "switches 112, 116, 126, 170 and 196 may be coupled in any appropriate manner");

a plurality of home gateways which are connected to the 10/1000 Mbps compatible port of the Fast Ethernet Switches, and a digital television, a analogue television, and a computer (12, fig. 2);

an IP telephone which is connected between the Fast Ethernet switch and the home gateway or between the home gateway and the computer (col. 13, lines 11-45, establishes a call between an IP telephone 38...at customer premises 12 and a gateway 124 or 130");

a plurality of gateways which are connected to the 10/1000 Mbps compatible port of the Fast Ethernet Switches, and to a phone and a PC with a interface via a link (col. 13, lines 11-45, establishes a call between an IP telephone 38...at customer premises 12 and a gateway 124 or 130");

wherein the video server is connected to a video storage (col. 4, lines 10-17, "media hosting servers"), the satellite digital television receiver server is connected to

an outdoor antenna for receiving satellite data signals (fig. 4A, “local TV tower, satellite dish farm”); and

a software system comprising:

an embedded operation system on the Gigabit Ethernet Switch, the Fast Ethernet switch and the home gateway, which is an embedded system formed by customizing the system kernel on the basis of a Linux system (it is inherent that each switch and gateway include an operating system for configuring the performance of switch or gateway”; col. 6, lines 28-43, “using configurable operating software”);

an operation system on the satellite digital television receiver server, the video server, the television conference server and the network management server, which is a Linux operation system or a Windows® system provided by Microsoft Corporation (it is inherent that each sever includes an operating system for configuring the performance of servers”; col. 6, lines 28-43, “using configurable operating software”);

modules of multicasting software which are distributed on the satellite digital television receiver server the video server the television conference server, the Gigabit Ethernet Switch, the Fast Ethernet switch and the home gateway, and they cooperate with each other, protocol, and achieve a control to the multicast media streams (col. 10, line 65 – col. 11, line 47, "IP multicast application software"),

modules of accounting software which are distributed on the home gateway, the video server and the network accounting server, wherein the home gateway

provides types of service, time of service and an amount of traffic used by the user (col. 15, lines 31-65, “account management server 190 that provides selected management functions associated with customer accounts and a network management server…coupled to an application...allow communicate between the servers, customer premises");

modules of network management software which are distributed in the network management server and all the network devices, and detect and analyze a configuration status a running status and a failure status about devices, wherein the accounting server generates a bill according to an accounting strategy and the statistic data of the user (col. 7, lines 1-50, “network operations and healing process, appropriate network management tools”);

application software for implementing a digital television reception and forwarding, a video on demand system, a computer network service, an IP telephone service (col. 11, lines 10-47, “IP multicast application software”).

14. Wendt does not specifically disclose discloses wireless gateways, wireless IP mobile phones and PCs with a wireless interface 1000 Mbps port. However, Kung discloses gateways, wireless IP mobile phones and PCs with a wireless interface port (col. 4, line 54 – col. 5, line 25, “broadband residential gateway 300 may be variously configured to provide one or more integrated communication interfaces to … televisions, personal computer…"; col. 20, lines 1-38). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings

of Wendt and Kung because Kung's wireless gateways would improve network access capability by allowing wireless communication among televisions, personal computers, and wireless telephones (Kung, col. 20, lines 1-38).

Although Wendt discloses multicast protocol or similar protocols for managing multicast group members (col. 10, lines 37-64), Wendt does not specifically discloses IGMP protocol. Furukawa discloses IGMP protocol (page 16, 0166; 0171, "IGMP protocol"). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Wendt and Furukawa because Furukawa's protocol would improve managing membership of the groups using the ICMP protocol that is well known in the art.

15. As to claim 2, it is rejected for the same reasons set forth in claim 1 above. In addition, Wendt discloses wherein the satellite digital television receiver server is an industrial PC with digital television receiver card which is connected to an outdoor antenna (fig. 4A, "local TV tower, satellite dish farm"); the video server may be one or more PC servers with disk array (col. 4, lines 10-17, "media hosting servers"); a PC functions as the network accounting server (190, fig. 4B); according to the configuration, the Gigabit Ethernet Switch can provide 1 to 6 1 000 Mbps ports or 8 to 48 100 Mbps ports; one 1000 Mbps interface module is exchangeable with eight 100 Mbps interface modules; the Fast Ethernet switch provides 16 to 32 10/100 Mbps compatible ports; the home gateway provides two or more 10 Mbps or 10/100 Mbps ports, in which one port

is connected to one Fast Ethernet switch (col. 5, lines 7-22; col. 17, line 61 – col. 18, line 21) (col. 17, line 61 – col. 18, line 21), and the other ports are connected to the IP telephone, the home computer or other devices (col. 5, lines 7-22; col. 17, line 61 – col. 18, line 21) (col. 17, line 61 – col. 18, line 21); a 15D type VGA interface, an S-Video interface, a composite video interface, a right sound channel interface and a left sound channel interface are used to send audio/video signals to television sets and audio devices (col. 8, lines 29-60); an infrared link is between a remote control unit and a remote controller (col. 3, lines 22-34); the gateway is connected to the Fast Ethernet switch or the Gigabit Ethernet Switch through one 10 Mbps or 10/100 Mbps port (col. 5, lines 7-22; col. 17, line 61 – col. 18, line 21) (col. 17, line 61 – col. 18, line 21).

16. As to claim 4, Wendt discloses wherein the system uses an asymmetric VLAN technique to achieve the separation of user information, and uses IP addresses and MAC addresses of devices in the home gateway as well as the VLAN numbers allocated in the system to validate the users' identities (col. 13, line 63 – col. 14, line 8, “VPN; col. 16, lines 2-20, “VLAN”).

17. As to claim 6, Wendt discloses wherein the speed phase locking of the application layer is processed on the home gateway.

18. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wendt, Kung, Furukawa, further in view of Rosengren et al, (US 5,633,683), hereinafter

Rosengren.

19. As to claim 5, Wendt does not specifically disclose there is no mosaic appearance in the digital television sets within 2 hours in average; the average duration of the mosaic appearance is no more that 0.5 second; the television channel switchover response is within 0.5 second, and the channel switchover is completed within 3 seconds; the VoD response is within 0.5 second, and the successful play begins within 3 seconds. Rosengren discloses there is no mosaic appearance in the digital television sets within 2 hours in average; the average duration of the mosaic appearance is no more that 0.5 second; the television channel switchover response is within 0.5 second, and the channel switchover is completed within 3 seconds; the VoD response is within 0.5 second, and the successful play begins within 3 seconds (figs. 7-8; col. 2, lines 25-44; col. 3, lines 15-26; col. 4, line 63 – col. 5, line 22). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Wendt, Kung, Furukawa and Rosengren because Rosengren's transmitting mosaic appearance as a program would improve displaying the selected mosaic appearance for a predetermined period of time (Rosengren, col. 4, line 63 – col. 5, line 22, "mosaic_picture_descriptor…length").

20. Applicant's arguments filed 3/11/08 have been fully considered but they are not persuasive.

(1) Applicant asserts that Wendt, Kung and Chen cannot implement the television,

Internet surfing and IP telephone services at the same time.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., implement the television, Internet surfing and IP telephone services at the same time) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

22. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jungwon Chang whose telephone number is 571-272-3960. The examiner can normally be reached on 6:30-2:00 (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JUNGWON CHANG/
Primary Examiner, Art Unit 2154
July 3, 2008